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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,082	12/09/2003	Yusuke Akiyama	2257-0240P	2776
2292	7590	06/14/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			RIELLEY, ELIZABETH A	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,082

Applicant(s)

AKIYAMA ET AL.

Examiner

Elizabeth A. Rielley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/9/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Amendment filed 12/9/2003 has been entered and considered by the Examiner. Currently, claims 1-10 are pending in the instant application.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “monotonously vary” in claim 6 is unclear. The

word “monotonous” means “uniform or unvarying”¹ therefore something cannot “monotonously vary”.

The term is indefinite because the specification does not clearly redefine the term. For the sake of this examination, the Examiner will understand this turn to mean the slit vary across the aperture region, every other slit varying in size.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 4-6, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorog (US 6225736).

8. In regard to claims 1 and 10, Gorog ('736) teaches a cathode ray tube (figure 1; 10; column 2 lines 13-36) comprising an electron gun (26) and a mask assembly for selecting electron beams emitted from said electron gun wherein said mask assembly comprising: a color selection mask (24; figure 1; column 2 lines 13-50) including an aperture region provided with a plurality of holes through which electron beams pass (40); and a mask frame for supporting said color selection mask and applying tension to said color selection mask in a first direction (50; column 2 lines 50-65), wherein said aperture region has a bridge region at an end thereof in said first direction (46; figure 3) and a slit region adjacent to said bridge region at least in said first direction (not numbered, above 46), said slit region has a plurality of

¹ <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=monotonous>

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strips (42), each extending in said first direction, arranged at a predetermined pitch in a second direction perpendicular to said first direction (column 2 line 31-column 3 line 6; see figures 3, 5-11) and a plurality of slits (44), each being defined between adjacent two of said plurality of strips (see figures 3, 5-11), and said bridge region (49; column 2 line 66 - column 3 line 67, into which said plurality of strips extend, has bridges for connecting adjacent two of said plurality of strips (see figure 10).

9. In regard to claim 2, Gorog ('736) teaches the aperture region has a plurality of bridge regions (49) aligned in said second direction (along 58 a "x-direction" as opposed to the slits 44, a "y" direction) , and at least one of said plurality of slits (44) is interposed between adjacent two of said plurality of bridge regions (the larger 49 regions; see figure 10).

10. In regard to claim 4, Gorog ('736) teaches adjacent two of said plurality of slits (44) in at least part of said slit region have different lengths from each other in said first direction. (see figure 3).

11. In regard to claim 5, Gorog ('736) teaches plurality of slits (44) in said slit region include a first slit having a first length and a second slit having a second length shorter than said first length, said first slit and second slit are arranged alternately (see figure 3).

12. In regard to claim 6, Gorog ('736) teaches a plurality of slits (44) in said slit region "monotonously vary" (see paragraph 5 above) in length in said first direction (see figure 6).

13. In regard to claim 9, Gorog ('736) teaches the plurality of strips (42) in said slit region have projections projecting in said second direction (see figures 3 and 5-11; the direction being into or out of the paper, a "z" direction due to the slit regions of 44; column 2 lines 37-50).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 3 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorog (US 225736) in view of Hashiba et al (US 4780641).

16. In regard to claim 3, Gorog ('736) teaches all the limitations set forth as described above, except adjacent two of said plurality of slits in at least part of said slit region have the same length in said first direction. Hashiba et al ('641) teaches adjacent two of said plurality of slits (3; figure 4; column 3 lines 1-7) in at least part of said slit region (1) have the same length in said first direction (see figure 2) in order to improve the flexibility of the apertured portion. Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the mask assembly of Gorog ('736) with the slit lengths of Hashiba et al ('641). Motivation to combine would be to increase the flexibility of the apertured portion.

17. In regard to claims 7-8, Gorog ('736) teaches all the limitations set forth, as described above, except for a vibration damper provided in contact with said color selection mask, including a damper line extending in said second direction to which tension is applied in said second direction, said damper line

being in contact with some of said plurality of strips in said at least part of said slit region. Hashiba et al ('641) teaches a vibration damper (4) provided in contact with said color selection mask (1), including a damper line (4) extending in said second direction to which tension is applied in said second direction (via 21), said damper line being in contact with some of said plurality of strips (not numbered; spaces between slits 3) in said at least part of said slit region (see figure 2; column 2 lines 23-34) in order to prevent the strips and slits from deviating due to outside interference. Hence it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the mask assembly of Gorog ('736) with the damper of Hashiba et al ('641). Motivation for combining is to prevent the strips and slits from deviating due to outside interference.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Inoue et al (US 20010020817), Song et al *20010004186), and Ligthart et al (US 6509679) all disclose similar mask assembly slits and stripes.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Elizabeth Rielley

Examiner
Art Unit 2879

msy 6/9/05
Mariceli Santiago
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